

Attorney Docket No. 9052-236
Application Serial No. 10/563,714
Filed: October 10, 2006
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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) An apparatus for manipulating a target object in an in-cell region of a vitrification plant, comprising:
 - a base securable to a trolley; and
 - a hydraulic arm mounted on the base arranged for being controlled remotely by a user located outside the in-cell region; wherein
 - the arm includes, at an end distal from the base, a tool coupling arranged to receive a tool for performing work on the target object, wherein the in-cell region includes a melter trolley, arranged to receive a canister into which a melt, formed during a vitrification process, is poured, and a plurality of connectors which are arranged for providing cooling fluid from a fluid source external to the in-cell region to an induction furnace located in the in-cell region.
2. (Canceled).
3. (Previously Presented) The apparatus as claimed in claim 1 wherein the hydraulic arm is arranged to have three degrees of movement.
4. (Previously Presented) The apparatus as claimed in claim 1 further comprising:
 - a hydraulic power pack for raising and lowering the arm with respect to the base and including hydraulic fluid.
5. (Previously Presented) The apparatus as claimed in claim 4 wherein the hydraulic fluid is water.
6. (Previously Presented) The apparatus as claimed in claim 2 wherein the target object comprises a portion of one of the connectors, each of the connectors comprising a through

wall connection connecting the fluid source to an in-cell location through a protective wall.

7. (Previously Presented) The apparatus as claimed in claim 6 wherein the portion comprises a portion of the connector between an in-cell surface of the protective wall and the location.

8. (Currently Amended) The apparatus as claimed in claim 1 An apparatus for manipulating a target object in an in-cell region of a vitrification plant, comprising:

a base securable to a trolley; and
a hydraulic arm mounted on the base arranged for being controlled remotely by a user located outside the in-cell region; wherein

the arm includes, at an end distal from the base, a tool coupling arranged to receive a tool for performing work on the target object, the apparatus further comprising:

a plurality of clamp devices each being controllable remotely to secure the base to an in-cell slewing ring of the melter trolley.

9. (Previously Presented) The apparatus as claimed in claim 1 wherein the tool comprises any one of a clamp, vacuum nozzle, reciprocating saw and/or chisel.

10.-13. (Canceled).

14. (Currently Amended) A holding tool arranged for securing to the tool coupling of an apparatus for manipulating a target object in an in-cell region of a vitrification plant, the apparatus comprising a base securable to a trolley; and a hydraulic arm mounted on the base arranged for being controlled remotely by a user located outside the in-cell region; wherein the arm includes the tool coupling at an end distal from the base, the holding tool comprising:

means for lifting arranged to be advanced under and engage with a lower surface of the target object and for lifting the target object when an arm of the apparatus for manipulating a target object to which the holding tool is coupled is raised; and

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a support back plate having a lower edge from which the means for lifting extends at a substantially perpendicular angle; and

a rest member extending upwardly from the means for lifting and angled backwardly with respect to the means for lifting whereby as a target object is lifted a portion of the target object engages with a region of the rest member and rocks backwardly about this point and away from the lifting member until the target object is supported by the rest member.

15. (Canceled).

16. (Currently Amended) The holding tool as claimed in claim [[15]] 14 further comprising:

a locking mechanism including a locking finger which is arranged to lock a target object at a predetermined location when the target object is supported by the rest member.

17.-18. (Canceled).